

Waste Analysis Plan (WAP) Activities During Interim Phase III at US Ecology Idaho (USEI)

USEI is submitting this document with a description of WAP activities to be undertaken during the third phase of return to operations at USEI's TSDF facility. Phase I was undertaken from February 8, 2019 through April 11, 2019 and consisted of receipt of bulk solids meeting LDR standards, the ability to receive bulk aqueous liquids for placement in site surface impoundments, and the ability to dispose any containers received for direct landfill and inspected, fingerprinted and verified prior to November 17, 2018. Phase II of USEI's operations began after the Class 2 Permit Modification was approved on April 3, 2019. USEI provided certifications regarding the Outdoor Stabilization Facility, which IDEQ approved. In the response, IDEQ authorized USEI to resume stabilization operations for non-hazardous liquids at the Outdoor Stabilization Facility. USEI was also permitted to dispose all remaining volumes of previously received direct landfill containers meeting LDR's as well as solidify all previously received containers of non-hazardous liquids.

USEI has determined that changes to the WAP are not needed for the additional operations that are being requested at this time, and is offering this document to document and outline waste pre-acceptance tasks that will be performed to keep USEI operations in compliance with the WAP as operations resume.

At this time, USEI is requesting IDEQ approval to treat site – generated wastes and wastes that were on-site at the time of the November 17, 2018 incident (Incident), as well as approval to begin receiving both bulk and containerized wastes which do not meet LDR for treatment and disposal. All treatment would be performed at the Outdoor Stabilization Facility. Site – generated wastes would include debris for microencapsulation, as well as water and residues generated from decontamination activities during demolition that require stabilization prior to disposal in the site landfill cells. Bulk and containerized wastes would include any regulated wastes allowed by permit with the exception of reactive metals for deactivation. At this time, US Ecology's moratorium on receipt of these types of waste for deactivation remains in effect. New inventories of regulated wastes would be received on a case-by-case basis until existing inventories of regulated waste are worked down – either through shipment off-site or through onsite treatment and disposal of these wastes – and until Pad 7 repairs have been completed and the building is again available for storage.

At this time USEI has the capability to perform all required inspections and fingerprinting that would be needed to accept waste for treatment, storage, and/or disposal. Methods that will be used to determine waste acceptability include visual inspection of the waste to determine conformity to the provided waste description, paint filter test, water reactivity, pH, flame test to determine possible combustibility/flammability of the material, cyanide screen (if applicable), and sulfide screen (if applicable). Findings which indicate the wastes do not conform to the profiled description will be clarified with the customer. If the discrepancy cannot be clarified or the waste does not meet LDR, it will be rejected to the customer or generator facility or to an alternate facility indicated by the customer.

Waste Pre-Acceptance

Waste pre-acceptance activities continue to be completed in accordance with Sections C.3 (Waste Acceptance Criteria) and C.6 (Pre-acceptance Procedures) of the facility WAP. Waste pre-acceptance activities will continue to utilize the established waste profiling process. The waste profile provides a description/characterization of the waste that is to be received. Waste profiles will continue to be

reviewed by the Customer Service Representative (CSR), the Radiation Protection Specialist (RPS) (on an as-needed basis; the RPS only reviews profiles that have a radioactive component associated with them), Laboratory personnel, EHS department, and the Technical Manager, as they have been in the past. During the review process, any needed comments are added to the profile cover sheet. These comments are entered into the “Special Handling Comments” section of AESOP by the CSR once the review process is complete, and automatically print on the work order (WO) cover sheet that is provided to operations staff for documentation of activities related to the received waste. An LDR may also be submitted during the pre-acceptance review process, though one is not required for approval. If an LDR is required, it will be submitted with the first load of material received; some wastes require an LDR be submitted each time the material is shipped to USEI. USEI tracks this requirement within the AESOP system. If an LDR is needed but is not provided, Customer Service will clarify with the customer. Waste may not be treated or disposed until an LDR has been received.

Incoming Waste Shipment Procedures

For receipts of waste, Section C.7 will be followed. Samples of incoming material are documented on the WO form by operations personnel. Laboratory personnel document results of any fingerprint analysis on the WO form as well. An example of a blank Work Order form is provided below. No additional tracking documents are utilized in the process.

When shipments of bulk material arrive onsite, trucks are directed to the scale. A “heavy weight” is recorded, shipping documents (Uniform Hazardous Waste Manifest, Bill of Lading, Non-Hazardous Waste Manifest, etc.) and LDR, if required, are submitted to the Receiving Office, and the truck proceeds to the sampling stand for inspection. Trucks of bulk solid are inspected at 100% and are sampled at the rate described in Section C.7.1.2 of the facility WAP. Every load of bulk liquid is inspected and sampled. All waste materials, whether regulated (RCRA, but meeting LDR) or non-hazardous are subjected to the same inspection and sampling criteria. Once incoming wastes have been verified as conforming to the waste profile, bulk loads for direct disposal are directed to the landfill cell. Bulk loads for treatment will be directed to the Outdoor Stabilization Facility once they are verified as conforming to the waste profile.

When shipments of containerized wastes are received onsite, trucks are directed to the scale. A “heavy weight” is recorded, shipping documents (Uniform Hazardous Waste Manifest, Bill of Lading, Non-Hazardous Waste Manifest, etc.) and LDR, if required, are submitted to the Receiving Office, and the truck proceeds to the inbound area at Pad 4 or Pad 7. Containers are unloaded from the transport vehicle and are inspected and sampled at the rate described in Section C.7.1.5 of the facility WAP. Pad 7 will not be utilized for this activity until repairs to the building are complete.

Supplemental Analysis

If supplemental analysis is needed for any reason, USEI will ensure that samples are sent to a certified lab and that a QA/QC report is received with each set of analytical data. Wastes will not be treated or disposed until results from the supplemental analysis, that satisfy the acceptance criteria, have been obtained.

Post-Treatment Analysis

Blank Work Order Form

Special comments \ regarding handling, treatment, additional sampling, etc. would print below the Safety Codes

Fingerprint
results generally
recorded in this
area